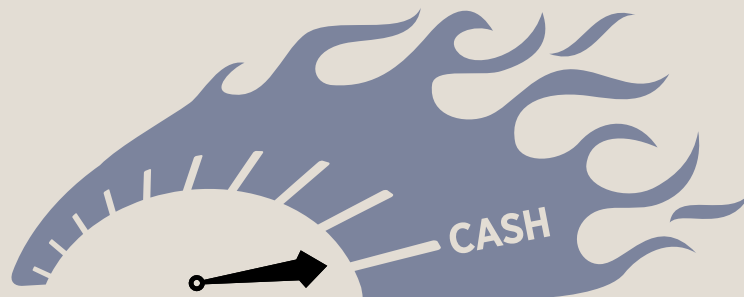


WHY CASH TRUMPS CARDS



DIGITAL TECHNOLOGY REIGNS SUPREME, BUT BANKNOTES ARE STILL MORE SECURE THAN ANY OTHER FAST, CONVENIENT PAYMENT MECHANISM. PHILIPPE ETIENNE EXPLAINS WHY

➤ A 2010 report by research company Aite Group estimated that card fraud in the US during 2008 cost \$8.6bn. At the same time, \$103m of counterfeit currency was removed from circulation. Even taking into account the value transacted by each payment type, this data suggests that the rate of card fraud is more than 20 times higher than the rate at which counterfeit currency is passed. It's a similar picture globally.

It might seem surprising, but there are good reasons why currency remains a highly secure payment mechanism. Central banks want confidence in their currencies because this underpins trust in their economies and the safety of transacting within them. So they ensure cash is secure in three ways. Firstly, they require banknotes to have security features that are easy to use, yet challenging to counterfeiters, and be made from materials that are forensically traceable. Notes have several levels of authentication measures, ranging from obvious features for public use through to covert features authenticated with specialised machines. Secondly, central banks devote significant resources to surveillance and law enforcement. Thirdly, they make the public aware of the various levels of security features in

banknotes and the public knows imprisonment is likely if counterfeiting is attempted.

Thanks to new materials and manufacturing techniques that incorporate closely guarded industrial secrets, banknote security technology is advancing. Since counterfeiters lack this technical know-how, it is much more expensive for them than for government printing facilities to manufacture banknotes. For example, it costs counterfeiters up to \$50 to manufacture and distribute a lookalike \$100 note because the latest design of genuine \$100 notes has a suite of security features that are state of the art for cotton paper banknotes, including colour-shifting inks, microprint and holographic and magnetic threads.

➤ Meanwhile, there is a whole new generation of banknote security technologies in the pipeline. In many countries, the base material on which banknotes are printed has been shifting from cotton paper to polymer and a range of hybrid materials that have followed. This change in material allows for innovative security features to be incorporated. The first of these innovations was the introduction of a transparent window that blocked the photocopying of banknotes, largely eliminating a previously

growing number of amateur counterfeiters and freeing up law enforcement resources to focus on professional counterfeiters. Newer security features further challenge counterfeiters by complementing and integrating with the transparent windows. Therefore, in order to create passable counterfeits, counterfeiters must increase their knowledge, equipment and skill. Currency counterfeiting in countries that have adopted these new technologies has plummeted from what were already low levels. In Australia and New Zealand, for example, counterfeiting has remained below 20 parts per million notes in circulation since polymer banknotes were introduced in the 1990s.

Even if counterfeiters can overcome the economic barrier presented by more secure banknotes, they still risk detection by dedicated and sophisticated surveillance operations. In the US, for example, counterfeiters must evade the well-resourced Secret Service, which was set up by Abraham Lincoln to combat counterfeiters in the wake of the American Civil War.

The risk of detection increases when the public is familiar with the core security features in banknotes. The presence of a transparent window, for example, can be assessed

instantly without any obvious action that would indicate distrust of someone passing a note. One technique increasingly being used to enhance public understanding as to what constitutes an authentic banknote is the use of common design elements throughout all banknote denominations within a currency series. This minimises the number of features and locations that the public must assimilate in order to reliably authenticate their banknotes.

➤ At the same time, in order to make a counterfeit banknote passable, counterfeiters increasingly have to use materials produced by a limited number of manufacturers and distributed through a limited number of suppliers. This makes it easier for law enforcement agencies to track down counterfeiters.

The combination of high-security banknote development, public education and law enforcement means that banknotes are, in fact, extremely difficult to counterfeit. With so many challenges to overcome in terms of counterfeiting banknotes, is it any wonder that criminals are focusing their efforts elsewhere? ♦

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